

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Units	95% UCL				
			RM 0-3.2	RM 3.2-4.9	RM 4.9-6.5	RM 6.5-8.8	RM >8.8
Metals							
Arsenic	0-24	mg/kg	9.18	9.23	6.59	9.53	11.60
	>24	mg/kg	5.39	7.34	10.60	6.34	10.20
Barium	0-24	mg/kg	122.42	146.46	104.86	103.69	85.80
	>24	mg/kg	58.70	108.08	162.59	57.42	103.00
Cadmium	0-24	mg/kg	3.04	4.89	2.32	1.14	0.76
	>24	mg/kg	0.60	2.18	3.88	0.58	0.60
Chromium	0-24	mg/kg	86.83	135.25	72.92	63.55	29.20
	>24	mg/kg	17.90	63.60	271.97	64.24	23.10
Lead	0-24	mg/kg	105.29	175.36	144.95	139.06	49.00
	>24	mg/kg	23.96	116.28	196.32	183.37	14.60
Mercury	0-24	mg/kg	0.38	0.64	0.19	0.22	0.14
	>24	mg/kg	0.17	0.33	0.72	0.24	0.02
Selenium	0-24	mg/kg	1.24	1.26	0.39	0.56	0.35
	>24	mg/kg	1.17	1.35	1.32	0.67	1.80
Silver	0-24	mg/kg	0.57	1.39	1.22	1.24	0.30
	>24	mg/kg	0.45	2.28	2.93	0.31	0.50
PAHs							
Benzo[b]fluoranthene	0-24	mg/kg	0.232	0.514	0.593	0.945	0.500
	>24	mg/kg	0.056	0.167	0.287	0.322	0.031
Chrysene	0-24	mg/kg	0.262	0.289	0.475	0.893	0.021
	>24	mg/kg	0.054	0.133	0.221	0.270	0.031
Fluoranthene	0-24	mg/kg	0.614	1.246	1.345	2.113	0.800
	>24	mg/kg	0.090	0.120	0.320	0.241	0.031
Pyrene	0-24	mg/kg	0.455	0.668	1.307	1.586	0.730
	>24	mg/kg	0.062	0.145	0.243	0.299	0.036
PCBs							
PCB Aroclor 1016	0-24	mg/kg	0.014	1.136	38.263	0.586	0.009
	>24	mg/kg	0.008	0.246	0.028	0.009	0.005
PCB Aroclor 1242	0-24	mg/kg	1.160	0.946	2.709	2.221	0.013
	>24	mg/kg	0.014	1.680	0.420	0.013	0.010

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Units	95% UCL				
			RM 0-3.2	RM 3.2-4.9	RM 4.9-6.5	RM 6.5-8.8	RM >8.8
PCB Aroclor 1254	0-24	mg/kg	0.022	0.035	1.263	0.426	0.160
	>24	mg/kg	0.010	0.126	0.318	0.006	0.010
PCB (total) ³	0-24	mg/kg	1.20	2.12	42.24	3.23	0.18
	>24	mg/kg	0.03	2.05	0.77	0.03	0.02
Semivolatile Organics							
2,4,6-Tribromophenol	0-24	mg/kg	4.724	3.601	3.007	3.293	2.600
	>24	mg/kg	5.406	3.806	3.580	3.062	6.700
2-Fluorobiphenyl	0-24	mg/kg	2.976	2.318	1.629	2.050	1.500
	>24	mg/kg	3.267	2.694	2.251	1.886	4.300
2-Fluorophenol	0-24	mg/kg	3.722	3.780	3.041	3.354	2.900
	>24	mg/kg	4.001	4.398	3.558	2.879	4.600
bis(2-Ethylhexyl)phthalate	0-24	mg/kg	1.044	3.064	70.148	0.921	0.810
	>24	mg/kg	0.043	3.392	75.696	0.354	0.021
Auxiliary Parameters							
Total Organic Carbon (95% LCL)	0-24	%	3.2	2.6	1.1	1.2	0.5
	>24	%	5.2	3.4	0.8	0.8	5.8

¹Units are mg/kg OC for PCBs and PAHs, mg/kg dw sediment for all other chemicals.

²The sediment guidelines expressed on an organic carbon basis are adjusted using the mean total organic carbon concentration for each river segment in the HQ calculations.

³Total PCBs was estimated by summing the concentrations of Aroclor 1016, 1242, and 1260.

dw = dry weight

OC = Organic Carbon

RM = River Mile

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Sediment Guidelines								Di Toro et al (2000) C_{SQG} (mg/kg OC) ²	
		Ingersoll et al. (1996)				Environment Canada (1995)		Ontario (1993)			
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
Metals											
Arsenic	0-24	13	50	11	48	5.9	17	6	33	-	
	>24	13	50	11	48	5.9	17	6	33	-	
Barium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Cadmium	0-24	0.7	3.9	0.58	3.2	0.596	3.53	0.6	10	-	
	>24	0.7	3.9	0.58	3.2	0.596	3.53	0.6	10	-	
Chromium	0-24	39	270	36	120	37.3	90	26	110	-	
	>24	39	270	36	120	37.3	90	26	110	-	
Lead	0-24	55	99	37	82	35	91.3	31	250	-	
	>24	55	99	37	82	35	91.3	31	250	-	
Mercury	0-24	-	-	-	-	0.174	0.486	0.2	2	-	
	>24	-	-	-	-	0.174	0.486	0.2	2	-	
Selenium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Silver	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
PAHs											
Benzo[b]fluoranthene	0-24	-	-	-	-	-	-	-	-	1656	
	>24	-	-	-	-	-	-	-	-	1656	
Chrysene	0-24	0.03	0.5	0.027	0.41	0.0571	0.862	0.34	460	1427	
	>24	0.03	0.5	0.027	0.41	0.0571	0.862	0.34	460	1427	
Fluoranthene	0-24	0.033	0.18	0.031	0.32	0.111	2.355	0.75	1020	1196	
	>24	0.033	0.18	0.031	0.32	0.111	2.355	0.75	1020	1196	
Pyrene	0-24	0.04	0.35	0.044	0.49	0.053	0.875	0.49	850	1180	
	>24	0.04	0.35	0.044	0.49	0.053	0.875	0.49	850	1180	
PCBs											
PCB Aroclor 1016	0-24	-	-	-	-	-	-	0.007	53	-	
	>24	-	-	-	-	-	-	0.007	53	-	
PCB Aroclor 1242	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Sediment Guidelines								Di Toro et al (2000) C_{SQG} (mg/kg OC) ²	
		Ingersoll et al. (1996)				Environment Canada (1995)		Ontario (1993)			
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
PCB Aroclor 1254	0-24	-	-	-	-	-	-	0.06	34	-	
	>24	-	-	-	-	-	-	0.06	34	-	
PCB (total) ³	0-24	0.05	0.73	0.032	0.24	0.0341	0.277	0.07	530	-	
	>24	0.05	0.73	0.032	0.24	0.0341	0.277	0.07	530	-	
Semivolatile Organics											
2,4,6-Tribromophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorobiphenyl	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
bis(2-Ethylhexyl)phthalate	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Auxiliary Parameters											
Total Organic Carbon (95% LCL)	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

¹Units are mg/kg OC for PCBs and PAHs, mg/kg dw sediment

²The sediment guidelines expressed on an organic carbon basis

³Total PCBs was estimated by summing the concentrations of

dw = dry weight

OC = Organic Carbon

RM = River Mile

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM 0-3.2								Di Toro et al (2000)	
		Ingersoll et al. (1996)				Environment Canada (1995)		Ontario (1993)			
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
Metals											
Arsenic	0-24	0.71	0.18	0.83	0.19	1.56	0.54	1.53	0.28	-	
	>24	0.41	0.11	0.49	0.11	0.91	0.32	0.90	0.16	-	
Barium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Cadmium	0-24	4.34	0.78	5.24	0.95	5.10	0.86	5.07	0.30	-	
	>24	0.86	0.15	1.04	0.19	1.01	0.17	1.00	0.06	-	
Chromium	0-24	2.23	0.32	2.41	0.72	2.33	0.96	3.34	0.79	-	
	>24	0.46	0.07	0.50	0.15	0.48	0.20	0.69	0.16	-	
Lead	0-24	1.91	1.06	2.85	1.28	3.01	1.15	3.40	0.42	-	
	>24	0.44	0.24	0.65	0.29	0.68	0.26	0.77	0.10	-	
Mercury	0-24	-	-	-	-	2.19	0.78	1.91	0.19	-	
	>24	-	-	-	-	0.96	0.34	0.84	0.08	-	
Selenium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Silver	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
PAHs											
Benzo[b]fluoranthene	0-24	-	-	-	-	-	-	-	-	0.004	
	>24	-	-	-	-	-	-	-	-	0.001	
Chrysene	0-24	8.72	0.52	9.69	0.64	4.58	0.30	0.77	0.018	0.006	
	>24	1.81	0.11	2.01	0.13	0.95	0.06	0.16	0.004	0.001	
Fluoranthene	0-24	18.60	3.41	19.80	1.92	5.53	0.26	0.82	0.019	0.016	
	>24	2.73	0.50	2.90	0.28	0.81	0.04	0.12	0.003	0.002	
Pyrene	0-24	11.38	1.30	10.35	0.93	8.59	0.52	0.93	0.017	0.012	
	>24	1.55	0.18	1.41	0.13	1.17	0.07	0.13	0.002	0.002	
PCBs											
PCB Aroclor 1016	0-24	-	-	-	-	-	-	2.00	0.008	-	
	>24	-	-	-	-	-	-	1.21	0.005	-	
PCB Aroclor 1242	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM 0-3.2								Di Toro et al (2000) C_{SQG}	
		Ingersoll et al. (1996)				Environment Canada (1995)		Ontario (1993)			
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
PCB Aroclor 1254	0-24	-	-	-	-	-	-	0.37	0.021	-	
	>24	-	-	-	-	-	-	0.17	0.010	-	
PCB (total) ³	0-24	23.91	1.64	37.37	4.98	35.06	4.32	17.08	0.072	-	
	>24	0.66	0.05	1.03	0.14	0.97	0.12	0.47	0.002	-	
Semivolatile Organics											
2,4,6-Tribromophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorobiphenyl	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
bis(2-Ethylhexyl)phthalate	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Auxiliary Parameters											
Total Organic Carbon (95% LCL)	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

¹Units are mg/kg OC for PCBs and PAHs, mg/kg dw sediment

²The sediment guidelines expressed on an organic carbon basi

³Total PCBs was estimated by summing the concentrations of

dw = dry weight

OC = Organic Carbon

RM = River Mile

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM 3.2-4.9								Di Toro et al (2000)	
		Ingersoll et al. (1996)				Environment Canada (1995)		Ontario (1993)			
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
Metals											
Arsenic	0-24	0.71	0.18	0.84	0.19	1.56	0.54	1.54	0.28	-	
	>24	0.56	0.15	0.67	0.15	1.24	0.43	1.22	0.22	-	
Barium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Cadmium	0-24	6.99	1.25	8.44	1.53	8.21	1.39	8.16	0.49	-	
	>24	3.12	0.56	3.76	0.68	3.66	0.62	3.64	0.22	-	
Chromium	0-24	3.47	0.50	3.76	1.13	3.63	1.50	5.20	1.23	-	
	>24	1.63	0.24	1.77	0.53	1.71	0.71	2.45	0.58	-	
Lead	0-24	3.19	1.77	4.74	2.14	5.01	1.92	5.66	0.70	-	
	>24	2.11	1.17	3.14	1.42	3.32	1.27	3.75	0.47	-	
Mercury	0-24	-	-	-	-	3.70	1.32	3.22	0.32	-	
	>24	-	-	-	-	1.92	0.69	1.67	0.17	-	
Selenium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Silver	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
PAHs											
Benzo[b]fluoranthene	0-24	-	-	-	-	-	-	-	-	0.01	
	>24	-	-	-	-	-	-	-	-	0.00	
Chrysene	0-24	9.65	0.58	10.72	0.71	5.07	0.34	0.85	0.02	0.008	
	>24	4.42	0.27	4.92	0.32	2.32	0.15	0.39	0.01	0.004	
Fluoranthene	0-24	37.76	6.92	40.19	3.89	11.22	0.53	1.66	0.05	0.04	
	>24	3.63	0.67	3.86	0.37	1.08	0.05	0.16	0.00	0.00	
Pyrene	0-24	16.70	1.91	15.18	1.36	12.60	0.76	1.36	0.03	0.02	
	>24	3.63	0.41	3.30	0.30	2.74	0.17	0.30	0.01	0.00	
PCBs											
PCB Aroclor 1016	0-24	-	-	-	-	-	-	162.22	0.83	-	
	>24	-	-	-	-	-	-	35.18	0.18	-	
PCB Aroclor 1242	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM 3.2-4.9								Di Toro et al (2000)	
		Ingersoll et al. (1996)			Environment Canada (1995)		Ontario (1993)				
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
PCB Aroclor 1254	0-24	-	-	-	-	-	-	0.58	0.04	-	
	>24	-	-	-	-	-	-	2.10	0.14	-	
PCB (total) ³	0-24	42.32	2.90	66.13	8.82	62.06	7.64	30.23	0.16	-	
	>24	41.04	2.81	64.12	8.55	60.18	7.41	29.31	0.15	-	
Semivolatile Organics											
2,4,6-Tribromophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorobiphenyl	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
bis(2-Ethylhexyl)phthalate	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Auxiliary Parameters											
Total Organic Carbon (95% LCL)	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

¹Units are mg/kg OC for PCBs and PAHs, mg/kg dw sediment

²The sediment guidelines expressed on an organic carbon basi

³Total PCBs was estimated by summing the concentrations of

dw = dry weight

OC = Organic Carbon

RM = River Mile

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM 4.9-6.5								Di Toro et al (2000) C_{SQG}	
		Ingersoll et al. (1996)				Environment Canada (1995)		Ontario (1993)			
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
Metals											
Arsenic	0-24	0.51	0.13	0.60	0.14	1.12	0.39	1.10	0.20	-	
	>24	0.82	0.21	0.96	0.22	1.80	0.62	1.77	0.32	-	
Barium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Cadmium	0-24	3.31	0.59	3.99	0.72	3.89	0.66	3.86	0.23	-	
	>24	5.55	1.00	6.69	1.21	6.51	1.10	6.47	0.39	-	
Chromium	0-24	1.87	0.27	2.03	0.61	1.95	0.81	2.80	0.66	-	
	>24	6.97	1.01	7.55	2.27	7.29	3.02	10.46	2.47	-	
Lead	0-24	2.64	1.46	3.92	1.77	4.14	1.59	4.68	0.58	-	
	>24	3.57	1.98	5.31	2.39	5.61	2.15	6.33	0.79	-	
Mercury	0-24	-	-	-	-	1.10	0.39	0.96	0.10	-	
	>24	-	-	-	-	4.15	1.49	3.61	0.36	-	
Selenium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Silver	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
PAHs											
Benzo[b]fluoranthene	0-24	-	-	-	-	-	-	-	-	0.03	
	>24	-	-	-	-	-	-	-	-	0.02	
Chrysene	0-24	15.82	0.95	17.58	1.16	8.31	0.55	1.40	0.10	0.03	
	>24	7.37	0.44	8.19	0.54	3.87	0.26	0.65	0.05	0.01	
Fluoranthene	0-24	40.74	7.47	43.37	4.20	12.11	0.57	1.79	0.12	0.11	
	>24	9.70	1.78	10.32	1.00	2.88	0.14	0.43	0.03	0.03	
Pyrene	0-24	32.68	3.73	29.70	2.67	24.66	1.49	2.67	0.15	0.10	
	>24	6.08	0.69	5.53	0.50	4.59	0.28	0.50	0.03	0.02	
PCBs											
PCB Aroclor 1016	0-24	-	-	-	-	-	-	5466.13	68.10	-	
	>24	-	-	-	-	-	-	3.95	0.05	-	
PCB Aroclor 1242	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM 4.9-6.5								Di Toro et al (2000) C_{SQG}	
		Ingersoll et al. (1996)				Environment Canada (1995)		Ontario (1993)			
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
PCB Aroclor 1254	0-24	-	-	-	-	-	-	21.05	3.50	-	
	>24	-	-	-	-	-	-	5.31	0.88	-	
PCB (total) ³	0-24	844.71	57.86	1319.86	175.98	1238.58	152.47	603.36	7.52	-	
	>24	15.31	1.05	23.93	3.19	22.45	2.76	10.94	0.14	-	
Semivolatile Organics											
2,4,6-Tribromophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorobiphenyl	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
bis(2-Ethylhexyl)phthalate	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Auxiliary Parameters											
Total Organic Carbon (95% LCL)	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

¹Units are mg/kg OC for PCBs and PAHs, mg/kg dw sediment

²The sediment guidelines expressed on an organic carbon basi

³Total PCBs was estimated by summing the concentrations of

dw = dry weight

OC = Organic Carbon

RM = River Mile

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM 6.5-8.8								Di Toro et al (2000) C_{SQG}	
		Ingersoll et al. (1996)				Environment Canada (1995)		Ontario (1993)			
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
Metals											
Arsenic	0-24	0.73	0.19	0.87	0.20	1.62	0.56	1.59	0.29	-	
	>24	0.49	0.13	0.58	0.13	1.08	0.37	1.06	0.19	-	
Barium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Cadmium	0-24	1.62	0.29	1.96	0.36	1.91	0.32	1.89	0.11	-	
	>24	0.82	0.15	0.99	0.18	0.97	0.16	0.96	0.06	-	
Chromium	0-24	1.63	0.24	1.77	0.53	1.70	0.71	2.44	0.58	-	
	>24	1.65	0.24	1.78	0.54	1.72	0.71	2.47	0.58	-	
Lead	0-24	2.53	1.40	3.76	1.70	3.97	1.52	4.49	0.56	-	
	>24	3.33	1.85	4.96	2.24	5.24	2.01	5.92	0.73	-	
Mercury	0-24	-	-	-	-	1.27	0.45	1.10	0.11	-	
	>24	-	-	-	-	1.36	0.49	1.18	0.12	-	
Selenium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Silver	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
PAHs											
Benzo[b]fluoranthene	0-24	-	-	-	-	-	-	-	-	0.05	
	>24	-	-	-	-	-	-	-	-	0.02	
Chrysene	0-24	29.75	1.79	33.06	2.18	15.63	1.04	2.63	0.16	0.05	
	>24	9.01	0.54	10.01	0.66	4.74	0.31	0.80	0.05	0.02	
Fluoranthene	0-24	64.04	11.74	68.17	6.60	19.04	0.90	2.82	0.17	0.14	
	>24	7.31	1.34	7.79	0.75	2.17	0.10	0.32	0.02	0.02	
Pyrene	0-24	39.64	4.53	36.04	3.24	29.92	1.81	3.24	0.15	0.11	
	>24	7.48	0.86	6.80	0.61	5.65	0.34	0.61	0.03	0.02	
PCBs											
PCB Aroclor 1016	0-24	-	-	-	-	-	-	83.69	0.90	-	
	>24	-	-	-	-	-	-	1.26	0.01	-	
PCB Aroclor 1242	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM 6.5-8.8								Di Toro et al (2000)	
		Ingersoll et al. (1996)				Environment Canada (1995)		Ontario (1993)			
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
PCB Aroclor 1254	0-24	-	-	-	-	-	-	7.10	1.02	-	
	>24	-	-	-	-	-	-	0.10	0.01	-	
PCB (total) ³	0-24	64.67	4.43	101.04	13.47	94.82	11.67	46.19	0.50	-	
	>24	0.56	0.04	0.88	0.12	0.82	0.10	0.40	0.00	-	
Semivolatile Organics											
2,4,6-Tribromophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorobiphenyl	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
bis(2-Ethylhexyl)phthalate	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Auxiliary Parameters											
Total Organic Carbon (95% LCL)	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

¹Units are mg/kg OC for PCBs and PAHs, mg/kg dw sediment

²The sediment guidelines expressed on an organic carbon basi

³Total PCBs was estimated by summing the concentrations of

dw = dry weight

OC = Organic Carbon

RM = River Mile

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM >8.8								Di Toro et al (2000)	
		Ingersoll et al. (1996)			Environment Canada (1995)		Ontario (1993)				
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
Metals											
Arsenic	0-24	0.89	0.23	1.05	0.24	1.97	0.68	1.93	0.35	-	
	>24	0.78	0.20	0.93	0.21	1.73	0.60	1.70	0.31	-	
Barium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Cadmium	0-24	1.09	0.19	1.31	0.24	1.28	0.22	1.27	0.08	-	
	>24	0.86	0.15	1.03	0.19	1.01	0.17	1.00	0.06	-	
Chromium	0-24	0.75	0.11	0.81	0.24	0.78	0.32	1.12	0.27	-	
	>24	0.59	0.09	0.64	0.19	0.62	0.26	0.89	0.21	-	
Lead	0-24	0.89	0.49	1.32	0.60	1.40	0.54	1.58	0.20	-	
	>24	0.27	0.15	0.39	0.18	0.42	0.16	0.47	0.06	-	
Mercury	0-24	-	-	-	-	0.80	0.29	0.70	0.07	-	
	>24	-	-	-	-	0.13	0.05	0.12	0.01	-	
Selenium	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Silver	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
PAHs											
Benzo[b]fluoranthene	0-24	-	-	-	-	-	-	-	-	0.06	
	>24	-	-	-	-	-	-	-	-	0.00	
Chrysene	0-24	0.68	0.04	0.76	0.05	0.36	0.02	0.06	0.01	0.00	
	>24	1.03	0.06	1.15	0.08	0.54	0.04	0.09	0.01	0.00	
Fluoranthene	0-24	24.24	4.44	25.81	2.50	7.21	0.34	1.07	0.15	0.13	
	>24	0.94	0.17	1.00	0.10	0.28	0.01	0.04	0.01	0.00	
Pyrene	0-24	18.25	2.09	16.59	1.49	13.77	0.83	1.49	0.17	0.12	
	>24	0.90	0.10	0.82	0.07	0.68	0.04	0.07	0.01	0.01	
PCBs											
PCB Aroclor 1016	0-24	-	-	-	-	-	-	1.21	0.03	-	
	>24	-	-	-	-	-	-	0.67	0.02	-	
PCB Aroclor 1242	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

Table C-5. Hazard quotients for aquatic life based on sediment exposures (Data from Inventory 15 [1998]).

Chemical	Depth (inches)	Hazard Quotients - RM >8.8								Di Toro et al (2000)	
		Ingersoll et al. (1996)			Environment Canada (1995)		Ontario (1993)				
		ERL	ERM	TEL	PEL	TEL	PEL	LEL	SEL		
PCB Aroclor 1254	0-24	-	-	-	-	-	-	2.67	0.90	-	
	>24	-	-	-	-	-	-	0.16	0.05	-	
PCB (total) ³	0-24	3.62	0.25	5.66	0.75	5.31	0.65	2.59	0.07	-	
	>24	0.47	0.03	0.74	0.10	0.70	0.09	0.34	0.01	-	
Semivolatile Organics											
2,4,6-Tribromophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorobiphenyl	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
2-Fluorophenol	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
bis(2-Ethylhexyl)phthalate	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	
Auxiliary Parameters											
Total Organic Carbon (95% LCL)	0-24	-	-	-	-	-	-	-	-	-	
	>24	-	-	-	-	-	-	-	-	-	

¹Units are mg/kg OC for PCBs and PAHs, mg/kg dw sediment

²The sediment guidelines expressed on an organic carbon basi

³Total PCBs was estimated by summing the concentrations of

dw = dry weight

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